

# PROCEEDINGS OF THE ELEVENTH ANNUAL ACQUISITION RESEARCH SYMPOSIUM

# THURSDAY SESSIONS VOLUME II

# U.S. Department of Defense Contract Spending and the Supporting Industrial Base, 2000–2013

David Berteau, Center for Strategic & International Studies Jesse Ellman, Center for Strategic & International Studies Gregory Sanders, Center for Strategic & International Studies Rhys McCormick, Center for Strategic & International Studies

Published April 30, 2014

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Prepared for the Naval Postgraduate School, Monterey, CA 93943.



Report Documentation Page			Form Approved OMB No. 0704-0188			
Public reporting burden for the collection of information is estimated to maintaining the data needed, and completing and reviewing the collect including suggestions for reducing this burden, to Washington Headqu VA 22202-4302. Respondents should be aware that notwithstanding at does not display a currently valid OMB control number.	tion of information. Send comments nurters Services, Directorate for Information	regarding this burden estimate of mation Operations and Reports	or any other aspect of the 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington		
1. REPORT DATE 30 APR 2014	2. REPORT TYPE		3. DATES COVE 00-00-2014	RED to 00-00-2014		
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER				
U.S. Department of Defense Contract S	pporting	5b. GRANT NUMBER				
Industrial Base, 2000-2013			5c. PROGRAM E	LEMENT NUMBER		
6. AUTHOR(S)			5d. PROJECT NUMBER			
			5e. TASK NUMBER			
		5f. WORK UNIT NUMBER				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  Center for Strategic & International Studies,1616 Rhode Island Ave  NW,Washington,DC,20036			8. PERFORMING ORGANIZATION REPORT NUMBER			
9. SPONSORING/MONITORING AGENCY NAME(S) A		10. SPONSOR/MONITOR'S ACRONYM(S)				
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)			
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution	ion unlimited					
13. SUPPLEMENTARY NOTES						
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The research presented in this report was supported by the Acquisition Research Program of the Graduate School of Business & Public Policy at the Naval Postgraduate School.

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# Panel 21. Exploring Managerial Implications of Current DoD Contracting Trends

### Thursday, May 15, 2014

3:30 p.m. – 5:00 p.m.

**Chair: Harry P. Hallock,** USA, Deputy Assistant Secretary for Procurement, Department of the Army

Discussant: Francois Melese, Professor, Naval Postgraduate School

U.S. Department of Defense Contract Spending and the Supporting Industrial Base, 2000–2013

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Services Supply Chain in the Department of Defense: Drivers of Success in Services Acquisition

Rene Rendon, Naval Postgraduate School Uday Apte, Naval Postgraduate School Michael Dixon, Naval Postgraduate School



# U.S. Department of Defense Contract Spending and the Supporting Industrial Base, 2000–2013

**David Berteau**—is senior vice president and director of the CSIS International Security Program, covering defense management, programs, contracting, and acquisition. His group also assesses national security economics and industry. Berteau is an adjunct professor at Georgetown University, a director of the Procurement Round Table, and a fellow of the National Academy of Public Administration and the Robert S. Strauss Center at the University of Texas. Prior to joining CSIS, he was director of national defense and homeland security for Clark & Weinstock, director of Syracuse University's National Security Studies Program, and a senior vice president at Science Applications International Corporation (SAIC). He served in the U.S. Defense Department under four defense secretaries, including four years as principal deputy assistant secretary of defense for production and logistics. Berteau graduated with a BA from Tulane University in 1971 and received his master's degree in 1981 from the LBJ School of Public Affairs at the University of Texas. [dberteau@csis.org]

Jesse Ellman—Center for Strategic & International Studies

Gregory Sanders—Center for Strategic & International Studies

Rhys McCormick—Center for Strategic & International Studies

#### Abstract

Over the past decade, the Center for Strategic and International Studies (CSIS) has been analyzing and reporting on contract spending for national security and across the federal government. This presentation analyzes contracting for products, services, and research and development (R&D) by the U.S. Department of Defense (DoD) and its key components. It provides an in-depth look at the trends currently driving nearly 70% of all federal contract dollars throughout the growth and subsequent inflection of defense spending of the 2000–2013 study period. This data will be analyzed in greater detail in the FY2013 update of the study team's series of reports on Defense Contract Trends, to be released later this spring. Throughout the year, the study team will publish and update the data underlying shorter publications on key issues relevant to the defense-industrial base.

#### Introduction

This presentation, with notes, is submitted to the Naval Postgraduate School for the proceedings of the 11th Annual Acquisition Research Symposium. The charts contained herein may be updated or modified for actual presentation at the symposium. As is true for all CSIS analysis, the views represented in this presentation are those of the project team, not CSIS as an institution.

This analysis covers the period from 2000–2013. For the purposes of this analysis, all years discussed are fiscal years, and all dollar figures are in constant 2013 billions. See the Methodology section on page 11 for more details.

This presentation provides CSIS analysis of nine key facets of the defense industrial base:

- Defense component
- Product/service area
- Competition (Overall and by component)
- Contract pricing mechanism
- Contract vehicle
- Contract size



- Vendor size
- Top 20 contractors

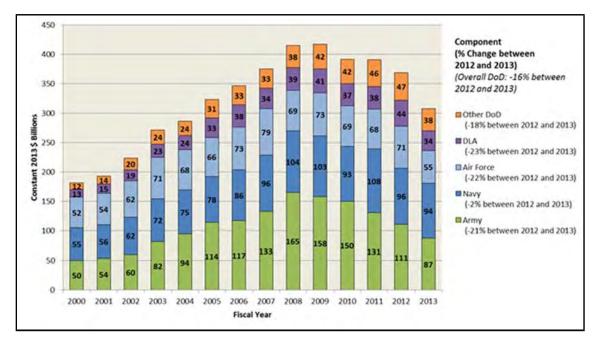


Figure 1. Defense Contract Obligations by Component, 2000–2013 (Source: Federal Procurement Data System; CSIS analysis)

This chart (Figure 1) breaks down defense contract obligations by major DoD component: Army, Navy, Air Force, Defense Logistics Agency (DLA), and "Other DoD." "Other DoD" is a category that includes all contracting entities within the DoD that are not captured in the other four components, such as the Missile Defense Agency (MDA), TRICARE, and U.S. Transportation Command (USTRANSCOM).



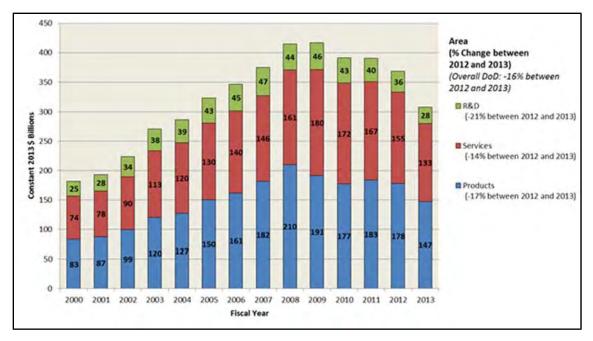


Figure 2. Defense Contract Obligations by Area, 2000–2013 (Source: Federal Procurement Data System; CSIS analysis)

This chart (Figure 2) breaks down defense contract obligations by what is being purchased, using government Product or Service Codes (PSCs) to group contract obligations into three categories: products, services, and research & development (R&D). The study team utilizes the classifications made by the DoD and entered into FPDS, which may differ from how vendors classify certain contracts. For example, a support contract that the vendor classifies as a services contract could be classified by the government as a products contract.



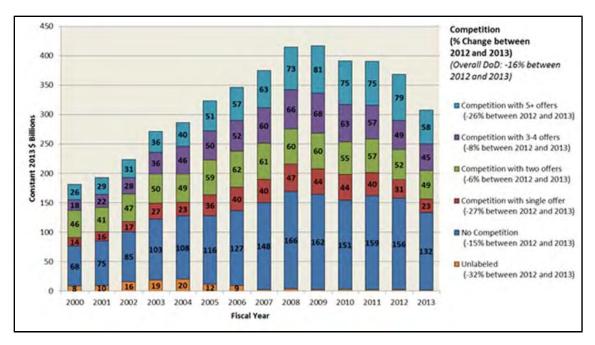


Figure 3. Defense Contract Obligations by Competition, 2000–2013 (Source: Federal Procurement Data System; CSIS analysis)

This chart (Figure 3) breaks down defense contract obligations by level of competition. The CSIS study team defines "effective competition" as competitions-awarded contracts that receive two or more offers. The study team believes that, all else being equal, contracts that receive more offers are more likely to receive the expected benefits of competition. The taxonomy used by CSIS to categorize contracts by competition can be found in the Appendix.

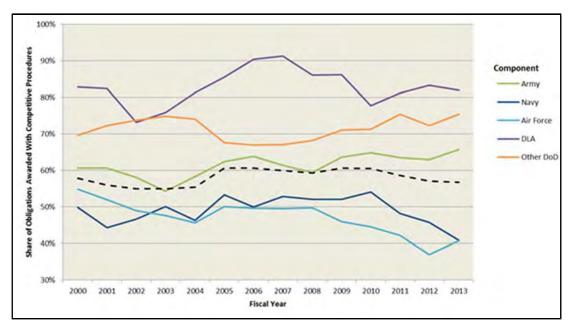


Figure 4. Defense Contract Obligations Awarded With Competitive Procedures, by Component, 2003 & 2013

(Source: Federal Procurement Data System; CSIS analysis)



This chart (Figure 4) further breaks down competition trends for DoD contract obligations, showing the share of contract obligations within each major DoD component (Army, Navy, Air Force, DLA, and "Other DoD") awarded with competitive procedures; the dashed black line provides the rate for overall DoD, for context. This includes competed contract obligations receiving any number of offers, as opposed to "effective competition," which only includes those contracts awarded after competition with two or more offers. Note that, for clarity, the y-axis for this chart starts at 30%.

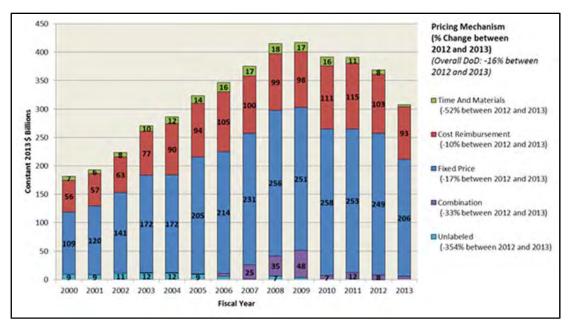


Figure 5. Defense Contract Obligations by Contract Pricing Mechanism, 2000–2013 (Source: Federal Procurement Data System; CSIS analysis)

This chart (Figure 5) breaks down defense contract obligations by the following contract pricing mechanisms: fixed price, cost reimbursement, time and materials, and combination. Combination contracts are those which contain both fixed price and cost reimbursement elements; guidance in recent years has significantly reduced the use of this classification.

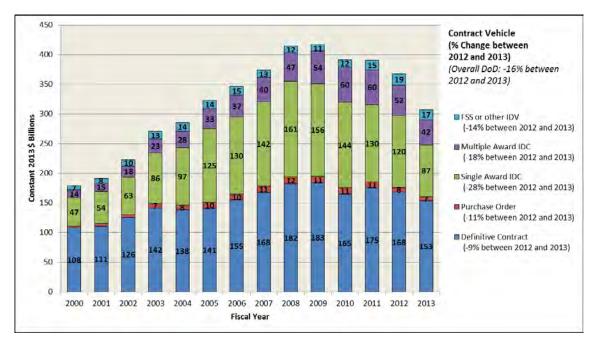


Figure 6. Defense Contract Obligations by Contract Vehicle, 2000–2013 (Source: Federal Procurement Data System; CSIS analysis)

This chart (Figure 6) breaks down defense contract obligations by the following contract vehicle types: definitive contracts, purchase orders, single award IDCs, multiple award IDCs, and "FSS or other IDVs." The "FSS or other IDV" category includes various special-purpose indefinite delivery vehicles (IDVs), such as blanket purchasing agreements (BPAs) and government-wide acquisition contracts (GWACs).



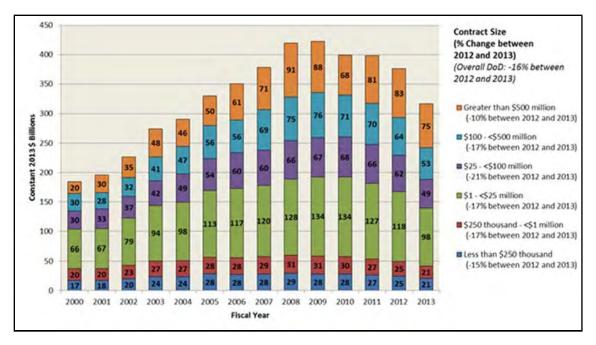


Figure 7. Defense Contract Obligations by Contract Size, 2000–2013
(Source: Federal Procurement Data System; CSIS analysis)

Note. For clarity, this chart excludes de-obligations, which results in the totals for each year being higher than in the other charts in this brief.

This chart (Figure 7) breaks down defense contract obligations by size of contract. For the purposes of this analysis, contract size is defined by total annual obligations under a contract in a given year. Thus, a single contract could qualify under different size categories in different years, depending on the amount of obligations under that contract in that fiscal year. The categories are: less than \$250 thousand; \$250 thousand to less than \$1 million; \$1 million to less than \$25 million; \$25 million to less than \$100 million; \$100 million to less than \$500 million; and greater than \$500 million.



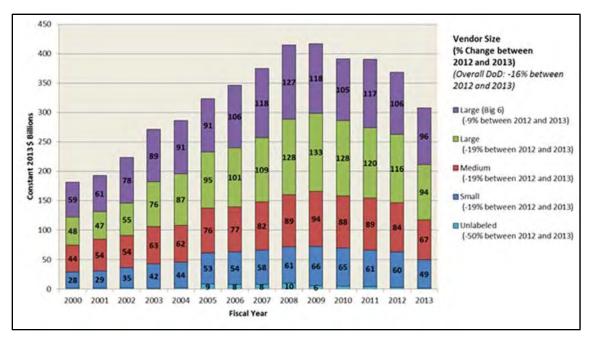


Figure 8. Defense Contract Obligations by Vendor Size, 2000–2013 (Source: Federal Procurement Data System; CSIS analysis)

This chart (Figure 8) breaks down defense contract obligations by size of vendor. To analyze the breakdown of competitors in the market into small, medium, and large vendors, the study team assigned each vendor in the database to one of four size categories. Any organization designated as small by the FPDS database—according to the criteria established by the federal government—was categorized as such unless the vendor was a known subsidiary of a larger entity. Vendors with annual revenue of more than \$3 billion, including from non-federal sources, are classified as large. The Big 6 is a subset of "large," separating out the six largest defense firms (Boeing, Lockheed Martin, Northrop Grumman, General Dynamics, Raytheon, and BAE). Medium is any contractor which qualifies as neither small nor large. Unlabeled vendors are those that cannot be categorized on the basis of the unique identifier they have been assigned, for example "miscellaneous foreign vendors" or "classified domestic contractors."



Table 1. Top 20 Defense Department Contractors, 2003 & 2013

(Source: Federal Procurement Data System; CSIS analysis)

Rank	Top 20 Contractors in 2003	Obligations in 2013 Millions	2002 Rank	Top 20 Contractors in 2013	Obligations in 2013 Millions	2012 Rank
1	Lockheed Martin	28,202	1	Lockheed Martin	36,972	1
2	Boeing	22,452	2	Boeing	19,898	2
3	Northrop Grumman	14,241	3	Raytheon	12,770	3
4	General Dynamics	10,556	5	General Dynamics	11,967	- 4
5	Raytheon	10,167	4	Northrop Grumman	9,859	5
Subtotal for Top 5		85,628			91,465	
6	United Technologies	5,663	6	L3 Communications	5,492	7
7	Halliburton	5,434	38	Huntington Ingalis	5,481	9
8	Stewart & Stevenson	5,180	39	United Technologies	5,339	6
9	L3 Communications	3,790	23	BAESystems	4,961	8
10	SAIC	3,590	7	SAIC	4,331	10
11	General Electric	3,578	12	Humana	3,460	11
12	BAE Systems	3,520	11	Dyncorp International	3,006	17
13	Humana	3,017	13	Health Net	2,908	13
14	Health Net	2,236	9	ITT	2,871	27
15	Computer Sciences Corp.	1,947	17	Bechtel	2,758	20
16	ιπ	1,842	18	Textron	2,656	25
17	URS	1,691	21	General Electric	2,231	22
18	Dyncorp	1,567	15	General Atomics	2,125	23
19	Honeywell	1,548	14	Bell-Boeing Joint Project Office*	2,096	22 23 14 30
20	Tri West Health care	1,528	22	Fluor	2,094	30
Total for Top 20		131,760			143,272	
Total for all industry		270,957			307,974	

<sup>\* -</sup> Joint Venture

Table 1 shows the Top 20 defense contractors in both 2003 and 2013. This analysis counts only prime contract dollars; the available data for subcontractor contract obligations has historically reported totals well below the expected volume of subcontract obligations. The two "Rank" columns (to the right of the respective "Obligations" columns) show where that contractor ranked in the previous fiscal year (in 2002 and 2012, respectively).

#### Methodology

The following methodological notes apply to the CSIS analysis that underlies all of the charts in this presentation, except where noted. Comments and questions are welcome, and can be directed to Jesse Ellman at jellman@csis.org.

- The Federal Procurement Data System (FPDS) was the primary source for this report.
- Federal regulations only require that all unclassified prime contracts worth \$2,500 and above be reported to FPDS.
- FPDS data are constantly being updated, including those for back years. As a consequence, the dollar totals for a given year can vary between reports.
- Contract classifications sometimes differ between FPDS and individual companies, resulting in some contracts that a company considers as services being labeled as products by FPDS and vice versa.
- Overseas Contingency Operations (OCO) and other supplemental funding appropriations are not separately classified in FPDS.
- All dollar figures are in constant 2013 dollars.



 A full explanation of the methodology used in this analysis, along with charts and data tables from the study team's FY2012 report, are available online at <a href="http://www.csis.org/NSPIR/DoD">http://www.csis.org/NSPIR/DoD</a>

#### About CSIS

At a time of new global opportunities and challenges, the Center for Strategic and International Studies (CSIS) provides strategic insights and policy solutions to decisionmakers in government, international institutions, the private sector, and civil society. A bipartisan, nonprofit organization headquartered in Washington, DC, CSIS conducts research and analysis and develops policy initiatives that look into the future and anticipate change.

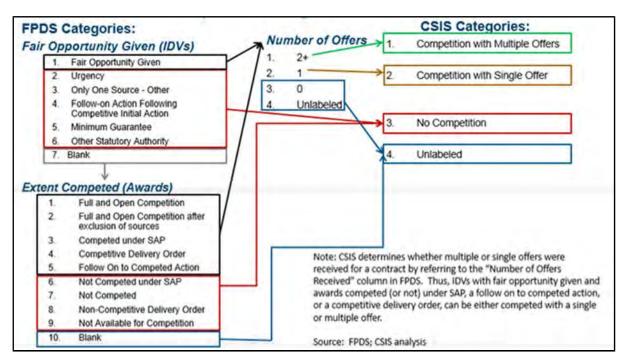
Founded by David M. Abshire and Admiral Arleigh Burke at the height of the Cold War, CSIS was dedicated to finding ways for America to sustain its prominence and prosperity as a force for good in the world.

Since 1962, CSIS has grown to become one of the world's preeminent international policy institutions, with more than 220 full-time staff and a large network of affiliated scholars focused on defense and security, regional stability, and transnational challenges ranging from energy and climate to global development and economic integration.

Former U.S. senator Sam Nunn became chairman of the CSIS Board of Trustees in 1999, and John J. Hamre has led CSIS as its president and chief executive officer since April 2000.

CSIS does not take specific policy positions; accordingly, all views expressed in this presentation should be understood to be solely those of the author(s).

#### Appendix: CSIS Competition Taxonomy







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## U.S. Department of Defense Contract Spending and the Supporting Industrial Base, 2000-2013

**Presenter: David Berteau** 

Lead Researchers: Jesse Ellman & Gregory Sanders

**Co-Researcher: Rhys McCormick** 

May 15, 2014 Acquisition Research Symposium

**Presentation** 

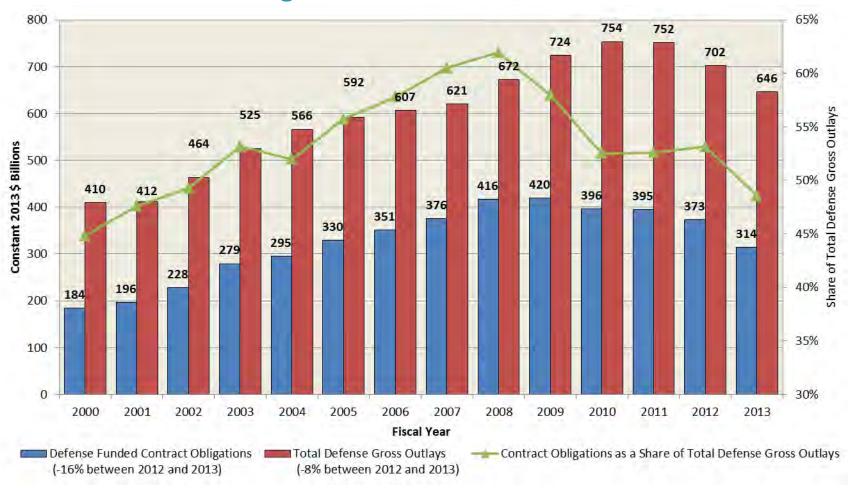
National Security Program on Industry and Resources Center for Strategic & International Studies 202-775-3183

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### Methodology

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- OCO and supplementals are not separately classified in FPDS.
- All dollar figures are in constant 2013 dollars
- Additional charts (with breakdowns by DoD component and by Products/Services/R&D), along with full data tables, are available online at <a href="http://www.csis.org/NSPIR/DoD">http://www.csis.org/NSPIR/DoD</a>

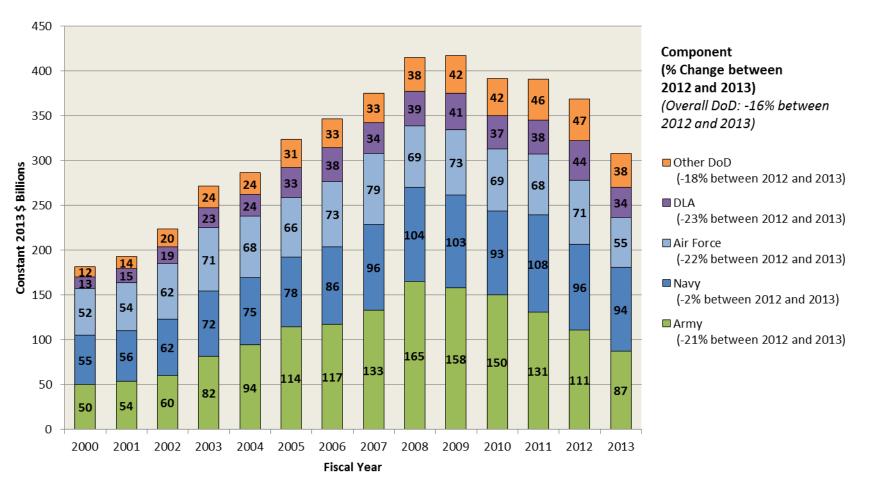
### **DoD Contract Obligations In Context, 2000-2013**



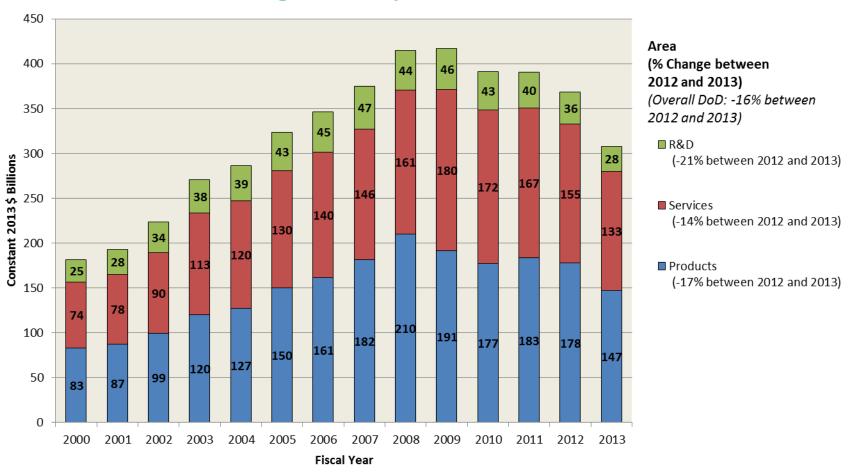
### **Composition of Total Defense Gross Outlays**

<b>Department of DefenseMilitary Programs</b>		2008	2009	2010	2011	2012	2013
Department of DefenseMilitary Programs	Discretionary	637.74	682.20	705.71	703.82	655.28	600.14
Department of DefenseMilitary Programs	Mandatory	4.26	4.91	5.77	6.83	6.32	7.93
Department of DefenseMilitary Programs	Net interest	0.00	0.00	0.00	0.00	0.00	0.00
Department of DefenseMilitary Programs	Total	642.00	687.11	711.48	710.65	661.60	608.07
Corps of EngineersCivil Works		2008	2009	2010	2011	2012	2013
Corps of EngineersCivil Works	Discretionary	5.97	7.68	10.65	10.75	8.03	6.72
Corps of EngineersCivil Works	Mandatory	0.21	0.32	0.62	0.56	0.46	0.39
Corps of EngineersCivil Works	Net interest	0.00	0.00	0.00	0.00	0.00	0.00
Corps of EngineersCivil Works	Total	6.19	8.01	11.27	11.31	8.50	7.11
International Assistance Programs		2008	2009	2010	2011	2012	2013
International Assistance Programs	Discretionary	5.13	5.60	5.77	5.91	5.22	4.59
International Assistance Programs	Mandatory	18.61	23.61	25.18	24.05	26.48	26.40
International Assistance Programs	Net interest	0.00	0.00	0.00	0.00	0.00	0.00
International Assistance Programs	Total	23.74	29.21	30.95	29.95	31.70	30.99
Total Defense		2008	2009	2010	2011	2012	2013
	Discretionary	648.84	695.48	722.13	720.47	668.53	611.45
	Mandatory	23.09	28.84	31.57	31.43	33.26	34.71
	Net interest	0.00	0.00	0.00	0.00	0.00	0.00
	Total	671.93	724.32	753.70	751.91	701.79	646.16

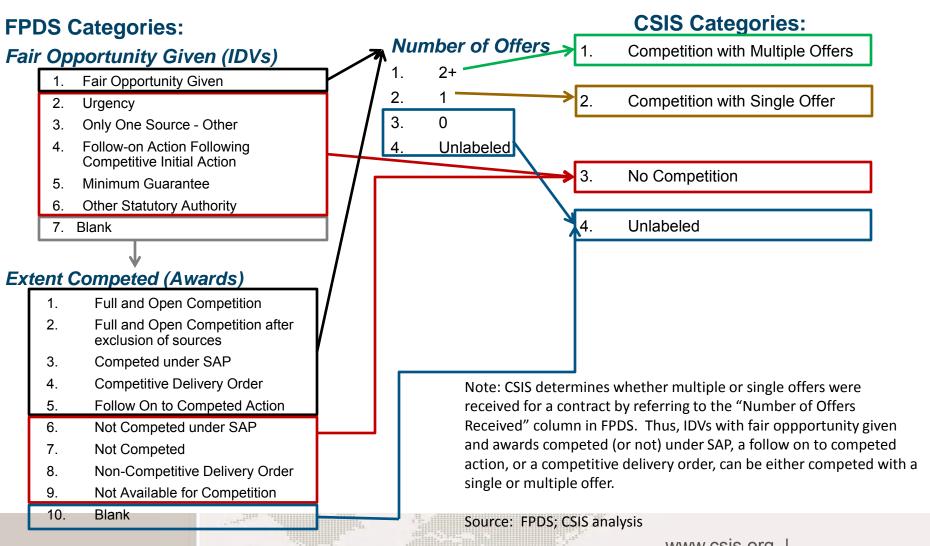
### **DoD Contract Obligations by Component, 2000-2013**



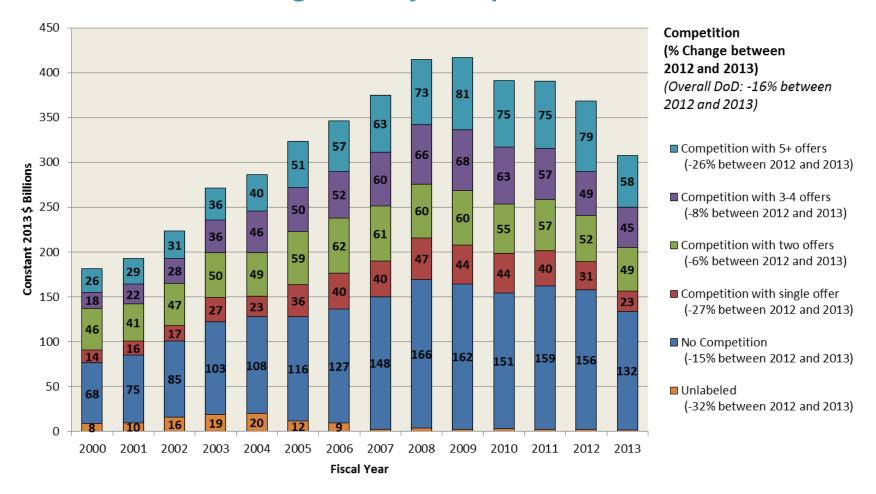
### **DoD Contract Obligations by Area, 2000-2013**



### FPDS vs. CSIS Competition Categories Flow Chart

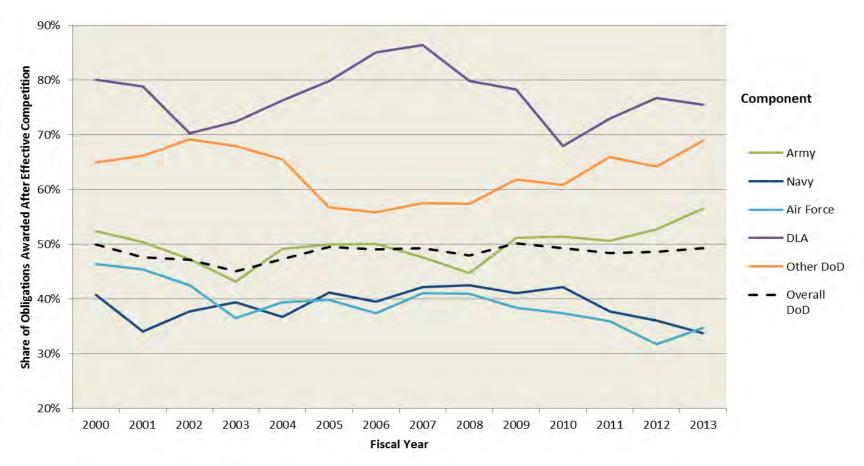


### **DoD Contract Obligations by Competition, 2000-2013**

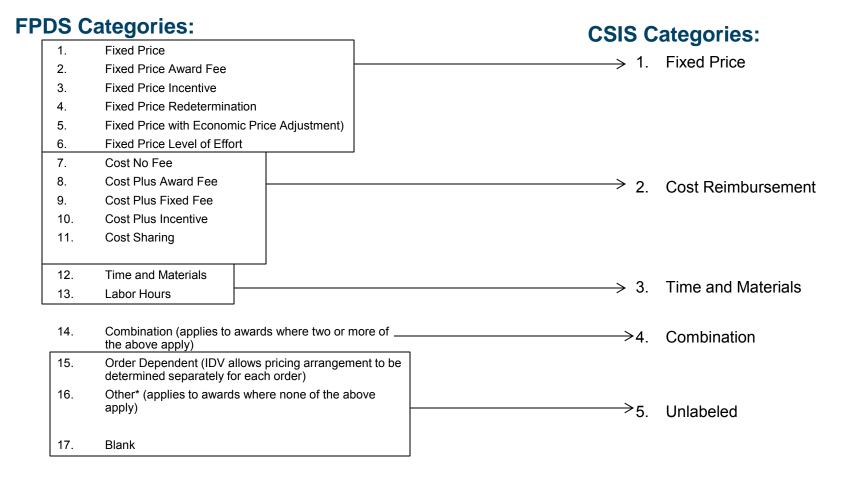




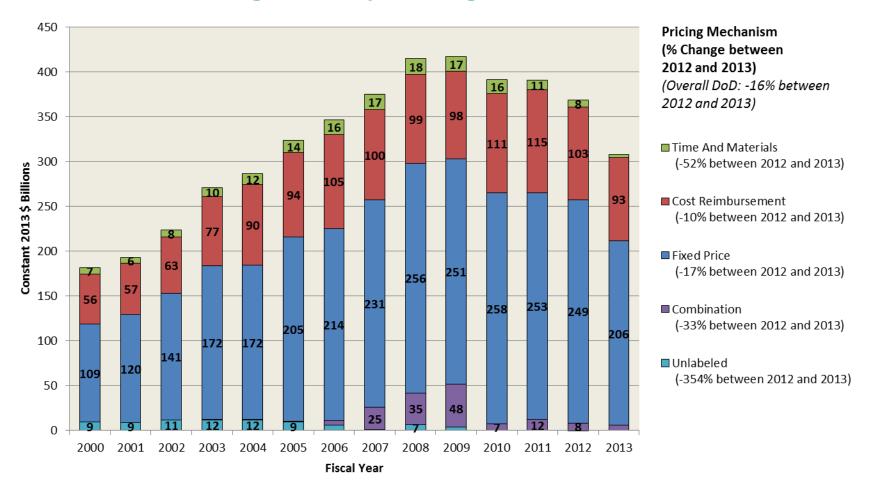
# Contract Obligations Awarded After Effective Competition (2+ Offers), by Component, 2000-2013



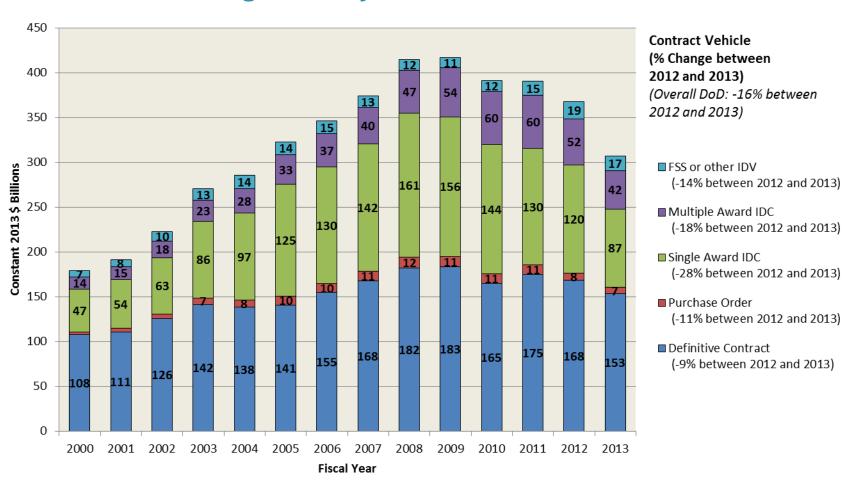
### **FPDS vs. CSIS Contract Pricing Mechanism Flow Chart**



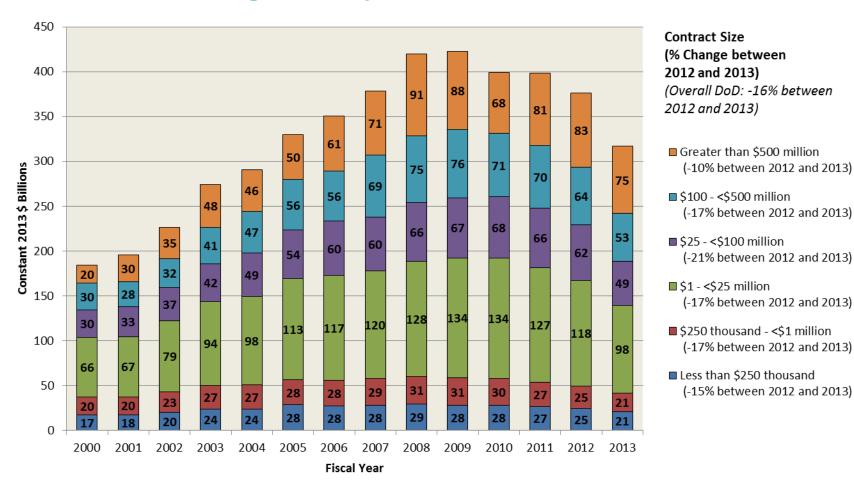
### DoD Contract Obligations by Pricing Mechanism, 2000-2013



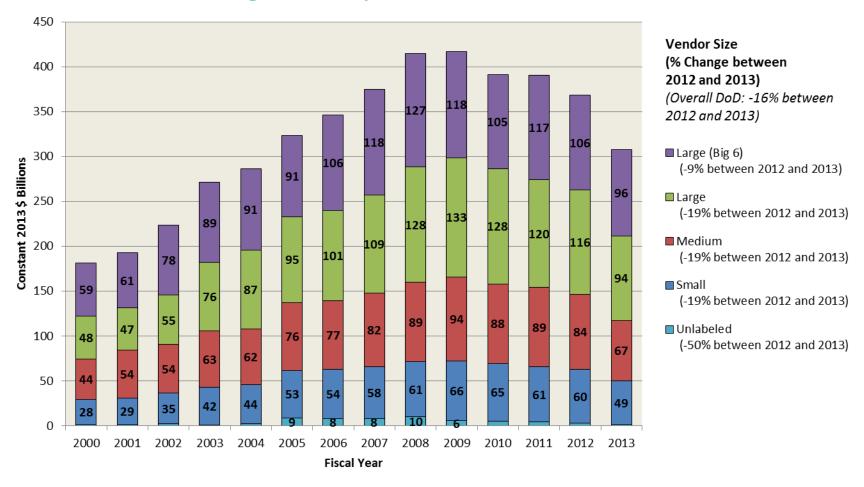
### **DoD Contract Obligations by Contract Vehicle, 2000-2013**



### **DoD Contract Obligations by Contract Size, 2000-2013**



### **DoD Contract Obligations by Vendor Size, 2000-2013**



### Top 20 DoD Vendors, 2003 & 2013

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Rank	Top 20 Contractors in 2003	2013 Millions	Rank	Top 20 Contractors in 2013	2013 Millions	Rank
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20	TriWest Healthcare	1,528	22	Fluor	2,094	30
Total for Top 20		131,760			143,272	
Total for all industry		270,957			307,974	

# **Appendix Charts**

# What are the specific sources of decline in DoD R&D contract obligations?

- In the FY2012 report, the study team determined that the main drivers of the decline in R&D contract obligations from 2009-2012 were MDAPs being cancelled or maturing out of R&D and into procurement account funding.
- Under sequestration, it appears that the majority of the major declines in R&D contract obligations were cuts to early-stage R&D, particularly in the missile and space realm.

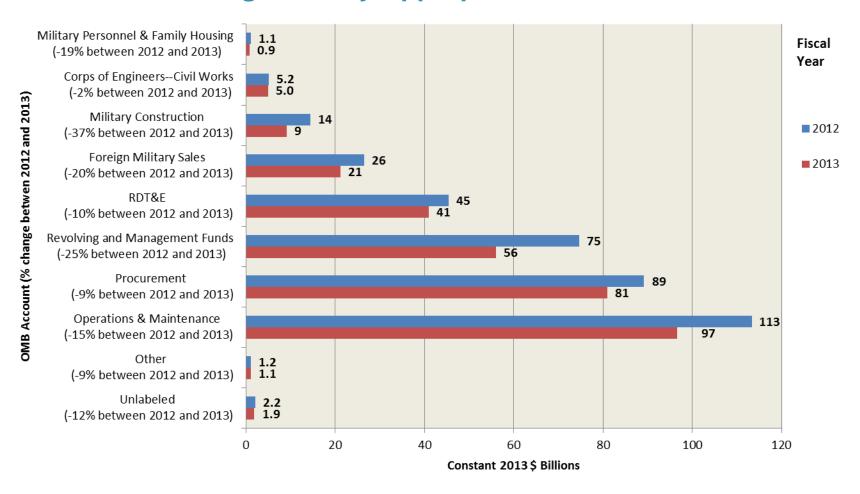
### **Army**

- \$500 million decline in MDA support for advanced development of missile/space systems
- \$550 million decline in uncategorized applied/exploratory R&D

#### Air Force

- Wideband Gapfiller from \$1.2 billion in 2012 to -\$2 million in 2013
- \$500 million decline in basic research and engineering development for uncategorized electronics/communications equipment
- \$600 million decline in advanced development and applied research/exploratory development for uncategorized missile and space systems

### **DoD Contract Obligations by Appropriations Account, 2012 & 2013**



# **Questions?**

### dberteau@csis.org

Full data tables for all charts, plus additional data breakdowns (by DoD Component and by Products/Services/R&D) will be available online at <a href="http://www.csis.org/NSPIR/DoD">http://www.csis.org/NSPIR/DoD</a> when the FY2013 Defense Contract Trends report is released in early summer.